



Federal Communications Commission  
Washington, D.C. 20554

March 1, 2010

DA 10-351

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Dear Mr. Moore and Ms. Sodos-Wallace:

As explained in greater detail herein, by this letter order we grant a waiver to Northern Wireless Communications, Inc. (Northern) to permit it to subchannelize its authorized bandwidth in the Bath, South Dakota Geographic Service Area (GSA) using both analog and digital modulation. Having done so, we also dismiss Northern's pending request to opt out of the Broadband Radio Service (BRS)/Educational Broadband Service (EBS) transition as moot.

The BRS/EBS transition process was initially established in 2004, when the Commission released a *Report and Order and Further Notice of Proposed Rulemaking (BRS/EBS R&O)* that transformed the rules and policies governing the licensing of services in the 2500-2690 MHz band.<sup>1</sup> Prior to the *BRS/EBS R&O*, the technical rules and band plan for the 2500-2690 MHz band were designed primarily to promote wireless cable and educational television services, which resulted in licensees receiving interleaved channel groups instead of contiguous channel blocks.<sup>2</sup> In most areas of the country, however, the deployment of wireless cable was not successful.

Consequently, in the *BRS/EBS R&O*, the Commission developed a new band plan and technical rules that permit a range of new and innovative wireless services in the 2500-2690 MHz band and give licensees contiguous channel blocks.<sup>3</sup> The new band plan consists of two low-power segments, the

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<sup>1</sup> See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 03-66, 19 FCC Rcd 14165 (2004) (*BRS/EBS R&O* and *FNPRM* as appropriate).

<sup>2</sup> In the EBS and BRS services, channels are usually licensed in groups of four. When EBS was created, EBS reception equipment could not receive adjacent channels without interference. Thus, the Commission interleaved the A block channels with the B block channels, the C block channels with the D block channels, the E block channels with the F block channels and the G block channels with the H block channels. See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, *Notice of Proposed Rulemaking and Memorandum Opinion and Order*, WT Docket No. 03-66, 18 FCC Rcd 6722, 6744 ¶ 47 (2003) (*NPRM*).

<sup>3</sup> See *BRS/EBS R&O*, 19 FCC Rcd at 14168 ¶ 4.

Lower Band Segment (LBS) and the Upper Band Segment (UBS), and a high-power segment, the Middle Band Segment (MBS).<sup>4</sup> The channel configuration and the technical rules for the LBS and UBS are designed to permit a range of wireless services.<sup>5</sup> The MBS, in contrast, consists of seven high-power channels and is designed for the transmission of video programming, for those licensees that still wish to provide such programming.<sup>6</sup> The *BRS/EBS R&O* further established a plan to transition EBS and BRS licensees from their interleaved channel locations to their new channel locations in the LBS, UBS, or MBS.<sup>7</sup> Not all licensees, however, are required to transition to the new band plan and technical rules. The *BRS/EBS R&O* permitted a limited number of Multichannel Video Programming Distributors (MVPDs) to seek a waiver from the Commission to “opt-out” of the transition, thus permitting them to continue their high-power, high-site operations throughout the entire 2500-2690 MHz band.<sup>8</sup> On April 27, 2006, the Commission released the *Third Memorandum Opinion and Order and Second Report and Order*, in which it affirmed its decision to consider these waivers on a case-by-case basis.<sup>9</sup>

Northern, a subsidiary of Northern Electric Cooperative, Inc., was established in 1988 to provide wireless cable to the residents of the Bath GSA.<sup>10</sup> On December 1, 1988, Northern launched the first rural cooperative wireless cable TV system and, in 2001, added wireless broadband.<sup>11</sup> Currently, Northern provides 28 channels of multi-channel video programming and uses Channel A4 for downstream broadband communications and BRS-1 for upstream broadband communications.<sup>12</sup> Its programming includes all five local off-air channels, a local public information channel, and local weather programming.<sup>13</sup> Northern is the only MVPD provider offering local weather programming, an important service for farmers and other agricultural workers in a rural area.<sup>14</sup> Northern provides MVPD service to 780 customers and broadband service to 720 customers.<sup>15</sup> Northern offers seven channels of local

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<sup>4</sup> *Id.* at 14169 ¶ 6.

<sup>5</sup> *Id.* at 14168 ¶ 4.

<sup>6</sup> *Id.* at 14185-14186 ¶ 4.

<sup>7</sup> *Id.* at 14197-14198 ¶ 72.

<sup>8</sup> *Id.* at 14199-14200 ¶ 77.

<sup>9</sup> Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, *Third Memorandum Opinion and Order and Second Report and Order*, WT Docket No. 03-66, 21 FCC Rcd 5606, 5645 ¶ 72 (2006) (*BRS/EBS 3rd MO&O*). In the *3rd MO&O*, the Commission also granted WATCH TV’s request to opt-out of the transition of the 2.5 GHz band in Lima, Ohio. *Id.* at ¶ 84.

<sup>10</sup> Request for Waiver (filed Apr. 25, 2007) (“Opt Out Waiver Request”) at 2-3. Originally established as Northern Rural Cable TV Cooperative, Inc. (NRCTV), NRCTV was renamed Northern Wireless Communications, Inc. *Id.* at 3.

<sup>11</sup> *Id.* at 3.

<sup>12</sup> *Id.* at 3.

<sup>13</sup> *Id.* at 3.

<sup>14</sup> *Id.* at 3-4.

<sup>15</sup> *Id.* at 3.

programming for \$12/month and a package of 28 channels for \$31/month.<sup>16</sup> It offers residential broadband service for \$39.95/month.<sup>17</sup>

On April 25, 2007, Northern filed a request seeking a waiver of Sections 27.1230-27.1239 of the Commission's Rules<sup>18</sup> seeking to opt out of the BRS/EBS transition for itself<sup>19</sup> and all of its EBS licensees/lessors<sup>20</sup> in the Geographic Service Area (GSA) of Bath, South Dakota.

On January 21, 2009, Clearwire filed a transition initiation plan for the Aberdeen, South Dakota BTA (BTA 001).<sup>21</sup> Each of the stations that Clearwire proposed to transition was licensed to Northern, and most of the stations in question were included in Northern's Opt Out Waiver Request.<sup>22</sup> The Aberdeen Transition Initiation Plan did not mention the pending Opt Out Waiver Request.<sup>23</sup>

Subsequently, Northern determined that, except for Section 27.1220 of the Commission's Rules, its proposed future operations would fully comply with the Commission's post-transition technical rules.<sup>24</sup> On July 22, 2009, Northern filed a request for waiver of Section 27.1220 of the Commission's Rules to allow subchannelization of analog channels.<sup>25</sup> Section 27.1220 of the Commission's Rules states, in pertinent part:

The width of a channel in the LBS and UBS is 5.5 MHz, with the exception of BRS channels 1 and 2 which are 6.0 MHz. The width of all channels in the MBS is 6 MHz. However, the licensee may subchannelize its authorized bandwidth, provided that digital modulation is employed and the aggregate power does not exceed the authorized power for the channel. . .

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<sup>16</sup> *Id.* at 3.

<sup>17</sup> *Id.* at 3.

<sup>18</sup> Opt Out Waiver Request. Sections 27.1230-27.1239 of the Commission's rules concern the transition of Broadband Radio Service (BRS) and Educational Broadband Service (EBS) to the band plan adopted by the Commission in the *BRS/EBS Report and Order*. 47 C.F.R. §§ 27.1230-27.1239.

<sup>19</sup> Northern is the licensee for Stations B001 (Channels BRS-1 and BRS-2A), WMX707 (Channels C1-C4), WLK408 (Channels E1-E4), WLK409 (Channels F1-F4), WMX708 (Channels G1-G4), WNEX688 (Channel H1), WNEX765 (Channel H2), and WNTI409 (Channel H3). Opt Out Waiver Request, Appendix A.

<sup>20</sup> Northern's three EBS licensees/lessors are as follows: Station WNC828 (Channels A1-A4/Northern State University); WLX900 (Channels B1-B4/Warner School District); and Station WLX288 (Channels D1-D4/Elm Valley School District). Opt Out Waiver Request, Appendix A.

<sup>21</sup> Letter from Nadja Sodos-Wallace, Regulatory Counsel and Assistant Secretary, Clearwire Corporation to Office of the Secretary, Federal Communications Commission, WT Docket No. 06-136 (filed Jan. 21, 2009) ("Aberdeen Transition Initiation Plan").

<sup>22</sup> The stations included in the Aberdeen Transition Initiation Plan were B001, WLK408, WLK409, WLX288, WLX900, WMX707, WMX708, WMY463, WNC828, WNEX688, WNEX765, and WNTI409. *Id.* at Exhibit 1.

<sup>23</sup> *Id.*

<sup>24</sup> See Engineering Statement of John Dalager, P.E. (Feb. 3, 2009) ("Dalager Engineering Statement").

<sup>25</sup> Request for the Waiver of the Digital Modulation Requirements for Sub Channelization, Northern Wireless Communications, Inc. (filed Jul. 22, 2009) ("2009 Waiver Request").

Northern wishes to subchannelize its channels in such a way so as to create a limited analog video system along with a digital data system.<sup>26</sup> It therefore requests a waiver of the provision of Section 27.1220 to allow subchannelization using, in part, analog modulation.<sup>27</sup> Northern states that if that a waiver of Section 27.1220 is granted, it would withdraw the Opt Out Waiver Request or not seek reconsideration of a Commission decision to deny that request.<sup>28</sup>

Since grant of the 2009 Waiver Request could make the Opt Out Waiver Request moot, we consider that waiver request first. The Commission stated that waivers will be granted if it is shown that: (i) the underlying purpose of the rules(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (ii) in view of the unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.<sup>29</sup> We conclude that Northern has justified a waiver of Section 27.1220 of the Commission's Rules under the second prong of the waiver standard.

Section 27.1220 of the Commission's Rules was intended to provide licensees with flexibility in subchannelization.<sup>30</sup> In this case, it would be appropriate to allow Northern to subchannelize its authorized bandwidth using both analog and digital modulation to permit continued operation of its analog video system. Since all of the BRS and EBS stations in the Aberdeen, South Dakota BTA are either licensed to or leased to Northern, there is no licensee within Northern's area of operations that could be harmed by allowing Northern to subchannelize in this manner. Furthermore, since Northern will comply with all other post-transition technical rules, allowing Northern to subchannelize in this manner will not harm licensees in adjacent geographic areas. We also find that a waiver will serve the public interest by allowing Northern to continue providing both MVPD and data services to the residents of rural South Dakota. We therefore waive Section 27.1220 of the Commission's Rules to allow Northern to subchannelize its authorized bandwidth using both analog and digital modulation.

In light of our grant of a waiver of Section 27.1220 of the Commission's Rules, we dismiss the Opt Out Waiver Request as moot. Northern now intends to operate pursuant to the post-transition band plan and technical rules,<sup>31</sup> so it no longer needs a waiver to opt out of the transition. We also recognize Clearwire as the transition proponent for the Aberdeen, South Dakota BTA because it was the only entity to file a transition initiation plan for that BTA. As required by the Commission, we will issue a public notice in the near future announcing Clearwire's status as the transition proponent for the Aberdeen, South Dakota BTA.<sup>32</sup>

Accordingly, IT IS ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), and Sections 1.925 and 27.1220 of the Commission's Rules, 47 C.F.R. §§ 1.925, 27.1220, that the Request for the Waiver of the Digital Modulation Requirements for Sub

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<sup>26</sup> 2009 Waiver Request at 1.

<sup>27</sup> *Id.*

<sup>28</sup> *Id.*

<sup>29</sup> 47 C.F.R. § 1.925(b)(3).

<sup>30</sup> See *BRS/EBS R&O*, 19 FCC Rcd at 14175 n.40.

<sup>31</sup> 2009 Waiver Request at 1.

<sup>32</sup> See *BRS/EBS 3rd MO&O*, 21 FCC Rcd at 5653 ¶ 93.

Channelization filed by Northern Wireless Communications, Inc. on July 22, 2009 IS GRANTED, and Section 27.1220 of the Commission's Rules IS WAIVED to allow Northern Wireless Communications, Inc. and its lessors to subchannelize their channels using both digital and analog modulation for the stations listed in footnotes 19 and 20 of this letter.

IT IS FURTHER ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), and Sections 1.925 and 27.1231(g) of the Commission's Rules, 47 C.F.R. §§ 1.925, 27.1231(g), that the Request for Waiver filed by Northern Wireless Communications, Inc. on April 25, 2007 IS DISMISSED AS MOOT.

These actions are taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

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